



Certificate of Analysis

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Product Name: ACSF (Artificial Cerebrospinal Fluid) Catalog No.: 3525 Batch No.: 107

IUPAC Name: Artificial cerebrospinal fluid

1. PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance: solution
Storage: Store at RT

2. ANALYTICAL DATA

Purity: 99.5% pH: 7.2

Osmolarity: 284 mOsm/L

Filter Integrity: Pass

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

Print Date: Dec 5th 2024

Batch No.: 107

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Product Name: ACSF (Artificial Cerebrospinal Fluid)

IUPAC Name: Artificial cerebrospinal fluid

Description:

Artificial cerebrospinal fluid (ACSF) is commonly used to maintain the oxygen supply, osmolarity and buffer pH of isolated neurons and brain slices in electrophysiology experiments. ACSF closely matches the electrolyte concentrations of cerebrospinal fluid and is prepared from high purity water and analytical grade reagents. Microfiltered and sterile. Final ion concentrations (in mM): Na+ 150; K+ 3.0; Ca²⁺ 1.4; Mg²⁺ 0.8; P 1.0; Cl- 155.

Physical and Chemical Properties:

Physical Appearance: solution

Storage: Store at RT

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

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Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Byun et al (2012) Induction of neuronal death by microglial AGE-albumin: implications for Alzheimer's disease. PLoS One **7** e37917. PMID: 22662249.